6J4

Description and Rating

HIGH-FREQUENCY TRIODE

GENERAL DESCRIPTION

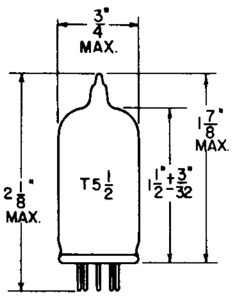
Principal Application: The 6J4 is a miniature high-mu triode designed for use as a grounded-grid amplifier at frequencies up to approximately 500 megacycles. The tube features an extremely high transconductance of 12000 micromhos and permits operation with a high signal-to-noise ratio. Three terminals on the grid provide effective grounding with a minimum of reactance. The 6J4 may also be used in conventional triode circuits with an ungrounded grid.

Cathode:	Coated Unipotential
Heater Voltage (A-C or D-C)	6.3 Volts
Heater Current	0.4 Ampere
Envelope:	T-5½ Glass
Base:	E7-1, Miniature Button 7-Pin
Mounting Position:	Any

Direct Interelectrode Capacitances: (Approx)#

Plate to Cathode and Heater (Max)	0.24	μμf
Grid to Cathode and Heater	5.5	μμf
Grid to Plate	4.0	μμf
Heater to Cathode	3.2	μμf

PHYSICAL DIMENSIONS

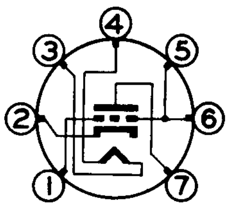


RMA 5-2

TERMINAL CONNECTIONS

Pin 1 - Grid
Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Grid
Pin 6 - Grid
Pin 7 - Plate

BASING DIAGRAM



RMA 7BQ
BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTER VALUES:

Plate Voltage	150	Volts
Plate Dissipation	2.25	Watts
Plate Current	20	Milliamperes
D-C Heater-Cathode Voltage	90	Volts
Grid Circuit Resistance	0.25	Megohm

CHARACTERISTICS AND TYPICAL OPERATION

GROUNDED-GRID CLASS A_1 AMPLIFIER

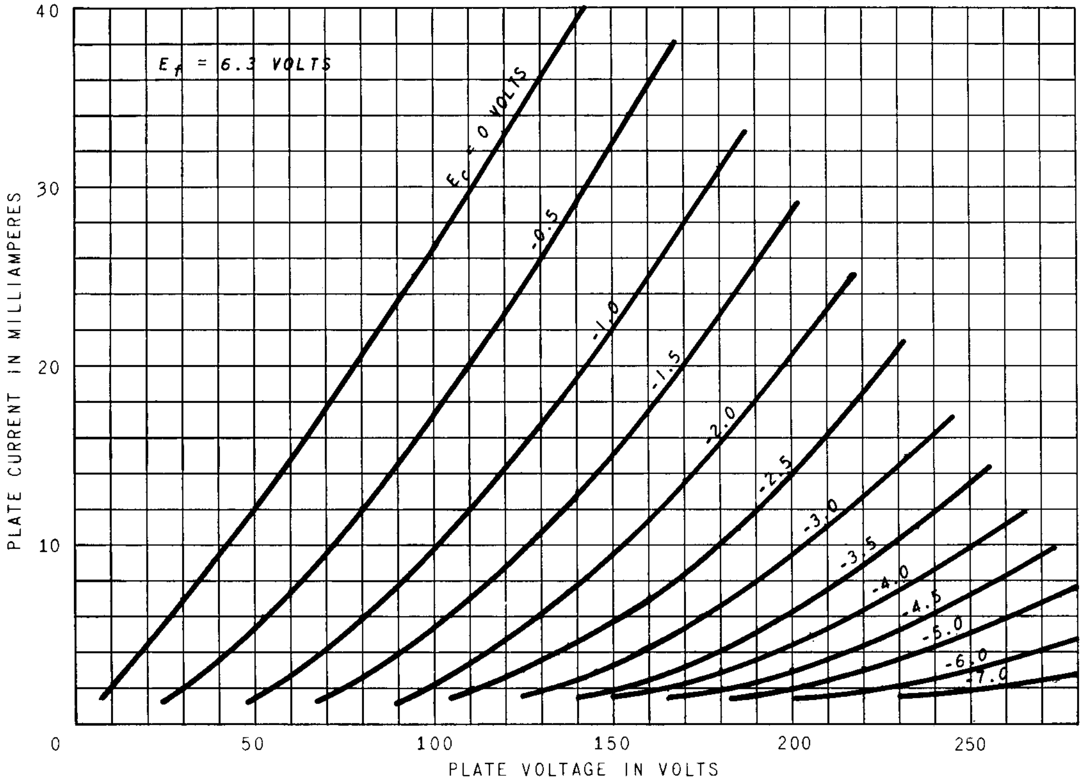
Plate Voltage	100	150	Volts
Cathode Bias Resistor*	100	100	Ohms
Amplification Factor	55	55	
Plate Resistance	5000	4500	Ohms
Transconductance	11000	12000	Micromhos
Plate Current	10	15	Milliamperes

With external shield #316 connected to grid.

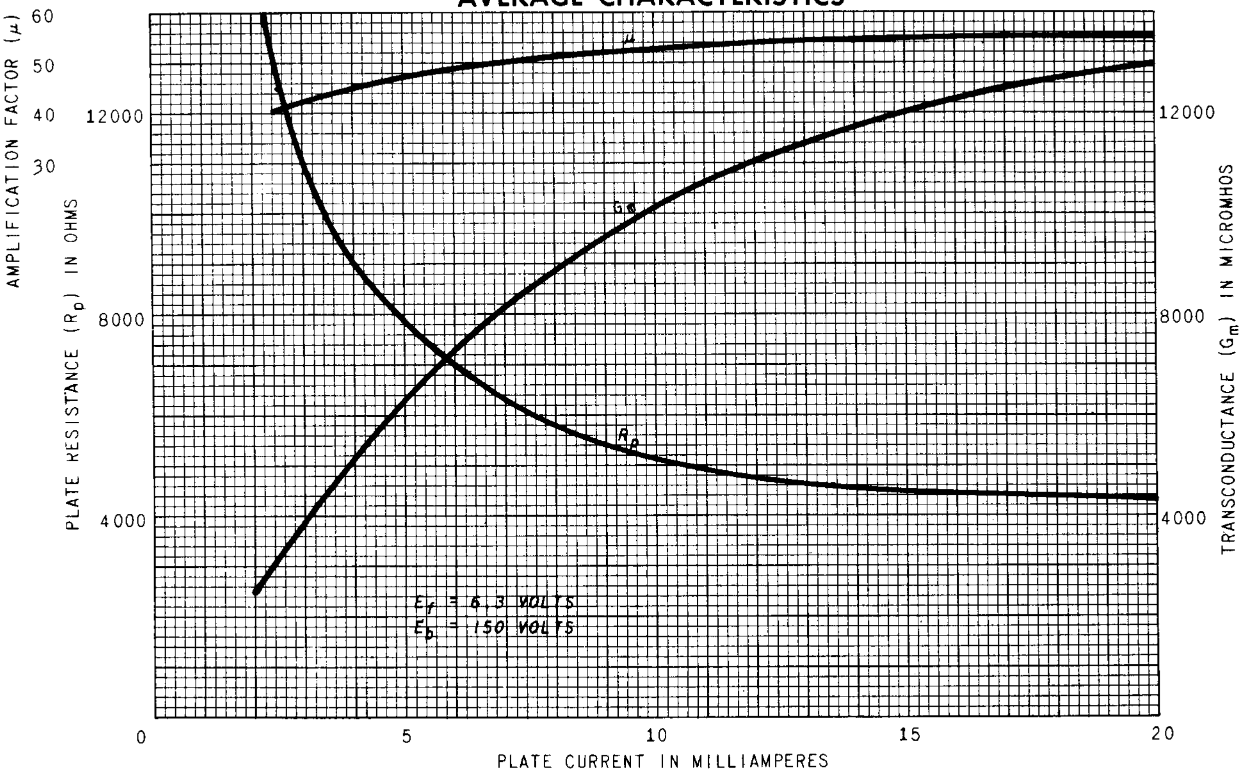
* *Operation with fixed bias is not recommended; in addition, the cathode bias resistor should always be suitably by-passed.*

Note: When the 6J4 is used in grounded-grid operation at high frequencies, all three grid terminals should be grounded to minimize the effects of grid-lead inductance.

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS



Tube Divisions, Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.